Applicant : Daniel F. Moore et al.                      Attorney's Docket No.: 09857-071001
Serial No. : 10/046,652
Filed     : January 14, 2002
Page    : 2 of 6

## REMARKS

The examiner considered Applicant's prior arguments with respect to claims 1-25, but rendered them moot in view of new ground(s) of rejection.

The examiner rejected Claims 1-25 under 35 U.S.C. 103(a) as being unpatentable over Rickard et al (US 6,016,483) in view of Finebaum et al (US 2002/0156719).

The examiner contends that:

> **Regarding claim 1 -**
> Rickard discloses a method of determining an opening price for a product traded in a trading system, the method executed over a distributed network computer system, said method comprising: with removing further comprising: identifying the oldest of interest at the most aggressive price on each side of the market; selecting the older interest of the identified interest to designate as initial interest; and matching initial interest against all contra side interest (e.g. col 6 ln 45-col 7 ln 47, col 10, 40-55; col 11 ln 15-25).
> Rickard does not specifically discuss detecting a lock/cross condition in the market prior to opening; removing the lock/cross condition to allow opening of trading in the particular product. However, it would be obvious to one of ordinary skill in the art to adapt Rickard to include this, or any number of other steps, in order to more efficiently and profitably trade. Additionally, Finebaum does include the step of removing a lock/cross condition through, for example, better pricing, (e.g. par. 0075. 0090). It would be obvious to one of ordinary skill in the art to combine the teachings of Rickard and Finebaum in order to more efficiently and profitably trade.

Applicant's claim 1 is distinct over Rickard whether taken alone, as argued in the prior Reply or when combined with Finebaum, as in the instant Office Action.

Richard fails to suggest detecting a lock/cross condition in the market prior to opening and removing the lock/cross condition to allow opening of trading in the particular product. The examiner admits this but, argues that: "it would be obvious to one of ordinary skill in the art to adapt Rickard to include this, or any number of other steps, in order to more efficiently and profitably trade." In the alternative, the examiner argues that: "Additionally, Finebaum does include the step of removing a lock/cross condition through, for example, better pricing, (e.g. par. 0075. 0090)."

Applicant has already addressed why it would not be suggested to include "detecting a lock/cross" in Richard, and the examiner apparently accepts this prior argument, in view of the

examiner current reliance on Finebaum. Applicant stands by the arguments of record regarding modification of Richard with what the examiner has advanced, but not specifically stated as common knowledge. The examiner has not shown how locked/crossed markets are relevant to the disclosed option markets taught by Richard. In contrast, Rickard, rather than seeking to clear a locked/crossed condition to permit opening, is concerned with allocating order imbalances between buy and sell public orders.

Finebaum like Richard fails to suggest ... detecting a lock/cross condition in the market prior to opening and removing the lock/cross condition to allow opening of trading in the particular product. Finebaum in [0090] discusses:

> The service matches trading orders according to the following rules: All orders are matched in a strict price/time priority. Within each price queue, each order has a time priority established by the time of entry for the quantity disclosed to other users. Order conditions may prevent a match from occurring. In such an event, a locked or crossed market may result. Users may unlock or uncross a market by, e.g., entering an order with a better price than the displayed order locking or crossing the market, even if the order has a minimum price difference between the displayed order locking or crossing the market. Moreover, under certain conditions trading may then occur at a price less than the newly entered better price. In sum, a locked market can be effectively unlocked without necessarily causing a trade to occur at a better price than the order locking the market.

Finebaum recognizes the possibility of locked/crossed markets. However, Finebaum does not suggest either detecting a lock/cross condition in the market or detecting the condition prior to opening of the market. In contrast, in Finebaum the locked/crossed condition is something that may arise and Finebaum addresses it by having users enter an order with a better price than the displayed order locking or crossing the market. In no event however, does Finebaum address a lock/cross condition at a market open and a mechanism, as claimed, to clear the locked/crossed market to allow trading in the particular product.

As was also argued of record, Rickard not only fails to teach locked/crossed markets, but fails to teach the mechanism used to remove the lock/cross, by: identifying the oldest of interest at the most aggressive price on each side of the market; selecting the older interest of the identified interest to designate as initial interest; and matching initial interest against all contra side interest.

Rickard is directed to the problem of: "determining a set of opening prices for a number of series of options traded on an options exchange and for allocating public order imbalances at the opening of trading." (See abstract). Applicant's invention is directed to a different problem, namely the removal of trading interest that locks or crosses a market in order that the market can have an orderly open. Rickard neither describes nor suggests removing the lock/cross condition by identifying the oldest of interest at the most aggressive price on each side of the market, selecting the older interest of the identified interest to designate as initial interest and matching initial interest against all contra side interest.

Indeed, the passages cited by the examiner (col 6, ln 45 to col 7, ln 47; col 10, lns 40-55; and col 11, lns 15-25) deal with determining a consistent set of implied volatilities that will maximize a weighted volume of trades across all series at the opening and allocating residual imbalances among public orders to the market makers by assigning contra positions to the market makers. Rickard assigns residual public orders to market makers in a manner that minimizes a cumulative measure of deviation between the post-opening desired target positions and the actual positions of each market maker at the conclusion of the first stage. These teachings do not suggest ... identifying the oldest of interest at the most aggressive price on each side of the market, selecting the older interest of the identified interest to designate as initial interest and matching initial interest against all contra side interest. Indeed nowhere in Rickard is it found to any teaching suggesting "the oldest of interest at the most aggressive price on each side of the market." Rather, Rickard "selects as the opening price the one yielding the higher mutual satisfaction weighted volume in that series." and therefore cannot teach designating of initial interest and matching of the initial interest.

The examiner contends that: "It would be obvious to one of ordinary skill in the art to combine the teachings of Rickard and Finebaum in order to more efficiently and profitably trade." Applicant disagrees.

Finebaum adds nothing more to Richard than what the examiner already had in the prior rejection where Rickard was used alone, since Finebaum teaching nothing more that locked/crossed conditions can exist in markets. However, Applicant had already admitted as

much in Applicant's background. Additionally, Finebaum does not address the locked/crossed condition at the opening of a market, but merely discusses the locked/crossed condition in the context of normal trading. Finebaum fails to offer the cure for this condition at the opening and thus like Rickard, fails to suggest removing the lock/cross condition to allow opening of trading ... identifying the oldest of interest at the most aggressive price on each side of the market, selecting the older interest of the identified interest to designate as initial interest, and matching initial interest against all contra side interest. Finebaum therefore does not cure the deficiencies in Rickard and therefore claim 1 is allowable over Rickard in view of Finebaum.

Claims 2-13 depend directly or indirectly from claim 1 and are allowable at least for the reasons discussed in claim 1. These claims also add patentable features for the reasons of record, since no combination of Rickard with Finebaum cures any of the deficiencies of Rickard alone.

Claim 14 recites a computer program product to remove a lock/cross condition to allow opening of trading in a security. The computer program product includes the features of instructions to identify the oldest of interest at the most aggressive price on each side of the market, select the older interest of the identified interest to designate as initial interest and match initial interest against all contra side interest. Claim 14 is allowable for analogous reasons as in claim 1.

Claims 15-21 depend directly or indirectly from claim 14 and are allowable at least for the reasons discussed in claim 14 and corresponding dependent claims.

Claim 22 is directed to a system for determining an opening price for products traded over a distributed, networked computer system. Claim 22 includes the feature of a server computer ... executing a server process that determines an opening price for the product, ... comprising instructions ... to identify the oldest of interest at the most aggressive price on each side of the market, select the older interest of the identified interest to designate as initial interest and match initial interest against all contra side interest. Claim 22 is allowable for analogous reasons as in claims 1 and 14.

Claims 23-25 depend directly or indirectly from claim 22 and are allowable at least for the reasons discussed in claim 22 and corresponding dependent claims.

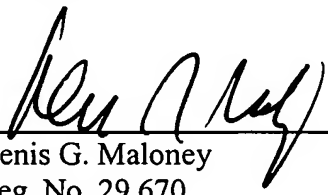The art cited by not applied by the examiner is seen as neither describing nor suggesting Applicant's invention.

It is believed that all the rejections and/or objections raised by the examiner have been addressed. All of the dependent claims are patentable for at least the reasons for which the claims on which they depend are patentable in addition to the reasons given above.

Any circumstance in which the applicant has addressed certain comments of the examiner does not mean that the applicant concedes other comments of the examiner, or made arguments for the patentability of some claims does not mean that there are not other good reasons for patentability of those claims and other claims, or amended or canceled a claim does not mean that the applicant concedes any of the examiner's positions with respect to that claim or other claims.

Enclosed is a check for **$120.00** for the Petition for Extension of Time. Please apply any other charges or credits to deposit account 06-1050.

Respectfully submitted,

Date: 6/27/06

Denis G. Maloney
Reg. No. 29,670

Fish & Richardson P.C.
225 Franklin Street
Boston, MA 02110
Telephone: (617) 542-5070
Facsimile: (617) 542-8906

21360908.doc